

### Anti-α-Tubulin (C-terminus) Antibody

Catalog # AN1998

# **Specification**

### Anti-α-Tubulin (C-terminus) Antibody - Product Information

Application WB, IHC, IF
Primary Accession P02552
Reactivity Bovine
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 50136

# Anti-α-Tubulin (C-terminus) Antibody - Additional Information

Gene ID 429035 Other Names

alpha Tubulin, Tubulin A1C

**Dilution** 

WB~~1:1000 IHC~~1:100~500 IF~~1:50~200

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti- $\alpha$ -Tubulin (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Shipping

Blue Ice

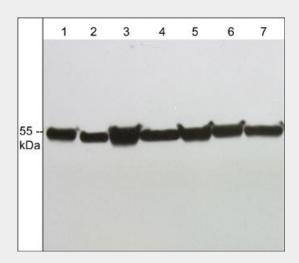
### Anti-α-Tubulin (C-terminus) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

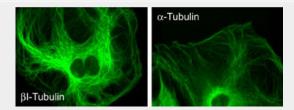
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-α-Tubulin (C-terminus) Antibody - Images





Western blot analysis of  $\alpha$ -tubulin expression in human A431 (lane 1), HUVEC (lane 2), Jurkat (lane 3), mouse J774.1 (lane 4), human PC-3 (lane 5), rat PC12 (lane 6), and mouse C2C12 (lane 7). The blot was probed with anti- $\alpha$ -Tubulin (C-terminus) at 1:1000.



Immunocytochemical labeling of  $\alpha$ - and  $\beta$ I-Tubulin in rat A7r5 cells. The cells were labeled with anti- $\beta$ I-Tubulin (TM1541) (left) and anti- $\alpha$ -tubulin (TM4111) (right). The antibodies were detected using Goat anti-Mouse conjugated to DyLight® 488.

### Anti-α-Tubulin (C-terminus) Antibody - Background

Microtubules (MTs) are cytoskeletal elements that play an essential role in cell division and cytoplasmic organization. MTs are dynamic polymers of a/ $\beta$ -Tubulin heterodimers. At least two populations of MTs, called dynamic and stable according to their rates of turnover, are readily distinguishable in cells. The proteins associated with MTs (MAPs) are among the best-known factors that regulate MT dynamics and stability. In addition, a variety of different post-translational modifications may also regulate MT dynamics and stability. Phosphorylation is one of these modifications and it can occur on serine, threonine, and tyrosine residues in  $\alpha$ - and  $\beta$ -Tubulin isoforms. Multiple kinases can phosphorylate Ser-444 at the C-terminus of  $\beta$ III-Tubulin in vitro, and unphosphorylated Ser-444 may be an early marker for cells of neuronal lineage. Cdk1 can phosphorylate Ser-172 in  $\beta$ -Tubulin during mitosis and this may impair tubulin incorporation into microtubules. In  $\alpha$ -tubulin, PKC can phosphorylate Ser-165 leading to increased cell motility in human breast cells.